

CLAIMS

1. A corrosion resistant member comprising a base material sprayed with a corrosion resistant glass sprayed coating which is an aluminosilicate glass or zirconia silicate glass containing at least one element selected from the group consisting of the group 2a, group 3a and group 4a of the periodic table of element.
2. The corrosion resistant member as claimed in claim 1, wherein the corrosion resistant glass sprayed coating is an aluminosilicate glass which comprises at least one element selected from the group consisting of elements of the group 3a of the periodic table of element and which when expressed by an Si-Al-group 3a three-component triangular diagram, has a composition such that the atomic ratio of the respective metal elements (Si:Al:group 3a) falls within the range connecting respective points of (70:20:10), (50:20:30), (30:40:30), (30:50:20), (45:50:5) and (70:25:5).
3. The corrosion resistant member as claimed in claim 1, wherein the corrosion resistant glass sprayed coating is a zirconia silicate glass which comprises at least one element selected from the group consisting of elements of the group 3a of the periodic table of element and which when expressed by an Si-Zr-group 3a three-component triangular diagram, has a composition such that the atomic ratio of the respective metal elements (Si:Zr:group 3a) falls within the range connecting respective points of (70:25:5), (70:10:20), (50:20:30), (30:40:30), (30:50:20) and (45:50:5).
4. The corrosion resistant member as claimed in claim 1, wherein the corrosion resistant glass sprayed coating is a zirconia silicate glass which comprises at least one

element selected from the group consisting of elements of the group 2a of the periodic table of element and which when expressed by an Si-Zr-group 2a three-component triangular diagram, has a composition such that the atomic ratio of the respective metal elements (Si:Zr:group 2a) falls within the range connecting respective points of (70:25:5), (45:25:30), (30:40:30), (30:50:20) and (50:45:5).

5. The corrosion resistant member as claimed in claim 1, wherein an interlayer of an SiO₂-containing glass sprayed coating is provided between the base material and the corrosion resistant glass sprayed coating.

6. The corrosion resistant member as claimed in claim 1, wherein an interface between the base material and the corrosion resistant glass sprayed coating, or any one of interfaces among the base material, the interlayer of an SiO₂-containing glass sprayed coating and the corrosion resistant glass sprayed coating forms a molten layer resulting from mutual melting each other.

7. The corrosion resistant member as claimed in claim 1, wherein the corrosion resistant glass sprayed coating has a surface roughness Ra of from 0.01 to 5 μm .

8. A process of producing a corrosion resistant member as claimed in claim 1, which comprises forming a corrosion resistant glass sprayed coating while melting the surface of a base material by a spraying flame.

9. The process of producing a corrosion resistant member according to claim 8, wherein the corrosion resistant glass sprayed coating is made to have a surface roughness

Ra of from 0.01 to 5 μm by melting the corrosion resistant glass sprayed coating by a spraying flame.

10. The process of producing a corrosion resistant member according to claim 8, wherein an interlayer of an SiO_2 -containing glass sprayed coating and/or a corrosion glass sprayed coating is sprayed on the base material having a surface roughness Ra of from 1 to 50 μm .

11. The corrosion resistant member according to claim 1, wherein a most superficial layer of the sprayed coating forms a spherical protruded layer in which the concentration of at least one of aluminum or zirconia and elements of the group 2a, group 3a and group 4a is lower than that of the internal sprayed coating.